saved the farmers of the state in the year 1909 about $750,000. The total savings during the third of a century that the system has been in operation would amount to more than ten million dollars. Were we to allow for the effect of competition in reducing the rate of the old line companies, and for compound interest on the premium charges saved from year to year, these figures would probably be doubled.

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THE POSITION OF INCOME BONDS, AS ILLUSTRATED BY THOSE OF THE CENTRAL OF GEORGIA RAILWAY

Income bonds have owed their existence to periods of financial embarrassment. During the long series of successive railway reorganizations which culminated in the nineties, the purpose of every endeavor which looked toward the rehabilitation of a bankrupt property was to decrease the immediate fixed charges. This was accomplished usually by compelling the holders of junior mortgages to accept obligations which involved no fixed rate of interest and no foreclosure rights because of default in interest payments. Interest or dividend on this new class of securities would be paid only if earned. Assessments on stock and consolidated mortgages were funded by the issuance of the same kind of security. This whole method of financing involved the formation of a new class of securities intermediate in character between the prior lien bonds and the common stock. It also involved the entire readjustment in the kind of securities represented in the liability account, with usually an increase in the par value of the junior issues and a slight but not corresponding decrease in the interest-bearing bonds. As a result of this shifting the majority of railway companies emerged from reorganiza-

tions burdened by an increase in capitalization, but with a lightened load of obligatory fixed charges. Reorganizations acted as a drug to tide over a period of weakness, — the future was mortgaged to satisfy the present.

This new class of securities, involving no fixed charges yet having a claim to earnings prior to the common stock, was usually represented by income bonds [1] or preferred shares of stock. The latter involve little that is of interest to us. Income bonds, on the contrary, present a puzzling chapter in railway finance marked by economic blunders and court litigations. It is now happily drawing to a close, as few income bonds have been issued of recent years.[2] Stripped of its technicalities an income bond was merely an obligation having a fixed date of maturity, but having a claim to interest only if the net earnings of the company were sufficient to warrant its payment. Its ostensible purpose was to give the creditor of the company a bond with all that this magic name implies; its real purpose was to create a kind of security which should not involve fixed charges, like an ordinary bond, nor voting power, like ordinary stock. It was a clumsy [3] endeavor to make a man at once both creditor and partner without giving him the rights of either.

It is true that legally the income bond holders come into possession of the net income as soon as earned,[4] whereas the mortgage bond holder has no right to the actual income unless he takes possession of the property by foreclosure.[5]

[1] At time of reorganization the courts consider income bonds a better security than stock, Hancock v. Toledo, etc. R.R. Co., 9 Fed. Rep. 738.

[2] The general bonds of the Cin. Ham. and Day., 1939, are an unfortunate exception. In all the railway securities of the country I am able now (Dec., 1910) to find but eleven separate issues of income bonds outstanding. Some of these are held by controlling companies and hence are not likely to occasion court litigation. Some are the obligations of railroads which have long since become dividend-paying roads. The issues that are now likely to cause dispute are very few in number.

[3] Gowen's "deferred income bonds" of the Philadelphia and Reading (1880) were actually to come after the common stock, — this latter being then quoted at 15 on the market.

[4] Galena and Chicago R.R. Co. v. Menzies, 26 Ill. 121.

[5] Am. Bridge Co. v. Heidelbach, 94 U. S. 798.

Yet this advantage is fictitious, as the company would, of course, pay the mortgage bond interest to prevent the foreclosure long before it considered the claims of the income bond holders. These latter claims, it will be observed, are based on economic rather than legal considerations, for they depend at the last analysis on the ability of the traffic to create actual net earnings. Net earnings have been defined, perhaps once for all, by the United States Supreme Court in the famous suit between the Government and the Union Pacific Railroad in 1878. "Net earnings are the excess of the gross earnings over the expenditures defrayed in producing them, aside from, and exclusive of, the expenditure of capital laid out in constructing and equipping the works themselves. Theoretically, the expenses chargeable to earnings include the general expenses of keeping up the organization of the company, and all expenses incurred in operating the works and keeping them in good condition and repair; whilst expenses chargeable to capital include those which are incurred in the original construction of the works, and in the subsequent enlargement and improvement thereof."[1] The whole problem as to whether or not the interest on the income bonds shall be paid narrows itself to one of bookkeeping, to an adjustment between the charges applicable to capital and income accounts.

The problem becomes the more clear cut when the stockholders and the income bond holders are different parties, since it is obviously to the advantage of the former to make a liberal allowance for maintenance and for the latter to reduce maintenance to a minimum so that net earnings shall be swelled. This is well illustrated by the recent history of the Central of Georgia Railway, leading up to a late decision by the Supreme Court of Georgia.

The present Central of Georgia Railway is the successor, after a reorganization in 1895, of the old Central of Georgia Railroad. This older company and its forebears had paid dividends almost continuously from 1840 to 1888. In this latter year its misfortunes began. A group of financiers

[1] Union Pac. R.R. Co. v. U. S., 99 U. S. 420.

had acquired a majority interest in the Central and by considerable manipulation had saddled this on the old Richmond Terminal Company, the predecessor of the Southern Railway. The arrangement portended good for neither company. The Central tried to continue paying 8 per cent on its stock without allowing proper maintenance charges; the Terminal Company became involved in a bitter internal strife from which it was extricated only through the reorganization proceedings of Mr. Morgan. The Central of Georgia defaulted on its interest payments and finally, in 1895, emerged from the reorganization with its nominal capital increased from thirty to fifty millions.

These new capitalization items are of importance as they throw light upon the present controversy over the income bonds. Thus in a corporation whose nominal

Bonds		
Prior Lien First Mortgage .	1,840,000	
General First Mortgage . . .	7,000,000	
Consolidated Mortgage . .	16,500,000	$25,340,000
Income Bonds:		
First Preference	4,000,000	
Second Preference	7,000,000	
Third Preference	4,000,000	15,000,000
Collateral Trust Bonds[1]	. . . . .	4,880,000
Common Stock	. . . . .	5,000,000
		$50,220,000

capital is over fifty million the control is vested in five millions of stock. Altho this stock has been closely held since the reorganization, some idea of its probable value may be gained from the fact that the third preference bonds which come before it sold for four and a half ($45 for a $1000 bond) as recently as 1900, or five years after the reorganization. That the preference bond holders held " bonds " and could not therefore vote compensated perhaps for the bond character of their security.

[1] Secured mainly by deposit of 19,950 shares of Ocean Steamship Co. stock, inventoried at $250 per share.

At all events these preference bonds were, in the reorganization, given for actual funded obligations, — in some cases first mortgage, prior liens on branch lines. That the prior lien bond holders would accede to these conditions shows the hopeless condition into which the finances of the old Central Railroad had descended just before the reorganization.

It is not my purpose to go into the details of the Central of Georgia subsequent to its reorganization.[1] Suffice it to say that conditions so improved that by 1905 and 1906 the full five per cent on all three issues of the income

	1896	*1897*	*1898*	*1899*	*1900*	*1901*	*1902*	*1903*
1st	1½ —	2¼ —	2 39	2 37	3¼ 47	5 72	3 80	5 70
2d	0 —	0 —	0 13	0 12	0 14	0 28	0 38	0 31
3d	0 —	0 —	0 7	0 6	0 7	0 15	0 25	0 22
	1904	*1905*	*1906*	*1907*	*1908*	*1909*	*1910*	
1st	5 80	5 95	5 94	5 75	0 68	0 85	0 96	
2d	5 53	5 77	5 84	3.7 60	0 68	0 74	0 94	
3d	0 41	5 67	5 78	0 50	0 54	0 70	0 93	

preference bonds was paid. Dividends on the income bonds for the fiscal year ending June 30, 1907, were due October 1st of the calendar year. During the summer rumors became current that refunding of the income bonds to a four per cent basis was contemplated, but conferences between directors and income bond holders availed nothing. At the same time the management gave out interviews to the effect that heavy maintenance charges and reduced traffic had seriously endangered the surplus of net earnings available for the income bond holders. Finally, on August 24, 1907, the directors declared five per cent on the first incomes, 3.729% on the second incomes, and nothing on the third. So adroit indeed was the bookkeeping that out of a total of over twelve millions gross earnings the manage-

[1] The following table gives the interest paid on the income bonds and the approximate average yearly price since they were actively dealt in on the N. Y. Exchange. The first figure in each case states the rate of interest, the second, the average market price.

ment carried to balance, after paying the 3.729% on the second incomes, just $32.95.[1] Five days later, on the 29th, a protective committee of the second and third income bond holders was arranged. On February 10th following, the Central Trust Company of New York as trustee for these bond holders filed a suit in their interest on the ground of concealed earnings.[2] On May 31, 1909, Colonel William Garrard returned an account to the court sustaining the contention of the Trust Company and the bond holders.[3] This finding was afterwards sustained by the Superior[4] and Supreme Courts[5] of the State.

To understand the true nature of the issue we must penetrate behind the screen of court proceedings and see who were actually the parties concerned. The issue was between the income bond holders, or the public, and the small number of stockholders. Who were these? At the time of the reorganization of the Central of Georgia in 1895 this almost worthless common stock was created[6] in favor of interests allied with the Richmond Terminal Reorganization Committee. To give this "*aqua pura*" any kind of value the railroad property must be built up. And as the interest on the income bonds was non-cumulative, "conservative" management demanded liberal expenditures for maintenance. In the spring of 1907 the Terminal reorganization interests sold this Central of Georgia stock to Messrs. Thorne and Perry. In November of the same year these gentlemen transferred the stock to E. H. Harriman who later, in 1908, conveyed it to the Illinois Central. Obviously it was for the interest of the Thorne-Harriman-Illinois Central group to make heavy expenditures on the property, so that the railway, the actual title of which

[1] Twelfth An. Report (1907) of Cen. of Geo. R'y Co., p. 3. The total net earnings available to the three classes of income bond holders was $461,030.

[2] Commercial and Financial Chronicle, 86, 419.

[3] Ibid., 88, 1436.

[4] Ibid., 89, 592.

[5] Dec. 14, 1910.

[6] The old Railroad stock was exchanged for third preference income bonds at the time of reorganization.

rested in the stockholders, should be improved; obviously it was for the interests of the income bond holders to have some of the net earnings deflected to their pockets even tho improvements waited.

The whole issue between the two parties turned on the question of concealed net earnings and upon the logical and legal distinction between income and capital accounts. Two main contentions were advanced by the bond holders, — a subsidiary steamship company had earnings in its treasury which should have been paid over to the railway company, and, secondly, the railway's own charges for maintenance were excessive. Let us examine the grounds for these two contentions.

At the time of the reorganization of the railroad the new company took over as part of the assets 19,950 out of 20,000 shares in the Ocean Steamship Company, which maintains regular service from Savannah to Philadelphia, New York, and Boston. This company owns valuable terminals at Savannah and Hoboken and had always done, as far as known, a very profitable business. As far back as 1888 it had contributed over one-sixth to the net earnings of the railroad. Since 1900 the steamship company has published no full report altho making heavy purchases of steamships for capital account out of earnings.[1] Now it is obvious that new and improved steamships are more than mere maintenance and this the court has expressly asserted.[2] Yet no accounting[3] of earnings was made to the railway, even tho the railway was carrying the interest on its five per cent collateral trust bonds issued against the steamship stock. This interest alone would have gone a great way toward the payment of the income bond holders' claim. A local Savannah paper estimated the steamship company's earnings for the year to be $720,000.[4]

[1] See especially the 11th (1906) and 12th (1907) An. Reports, Cen. Geo. R'y Co.

[2] Mackintosh v. Flint and Pere Marq. R. R. Co., 34 Fed. 609.

[3] A railroad cannot merely estimate depreciation unless an account is kept for all the parties interested, U. S. v. Kan. Pac. R'y Co., 99 U. S. 459.

[4] Commercial and Financial Chronicle, 85, 529.

This may have been excessive, altho the recent accounting to the court places the earnings at about $540,000.

The second contention of the bond holders concerned maintenance charges. During the year 1907 the Central of Georgia had gross earnings of twelve million, — $6316 per mile, of which it spent about $2002 per mile for maintenance. The ratio is 31.54%. For the ten-year period the ratio was practically identical, — 31.52%. Was this excessive? The average maintenance percentage for the great trunk lines was for the last decade almost exactly twenty-five per cent.[1] Yet it may be contended that the conditions are different in the south. Comparing the maintenance percentage of the Central of Georgia

Road	Total Gross Receipts	Maintenance	Percentage of Maintenance to Gross Receipts	Road	Total Gross Receipts	Maintenance	Percentage of Maintenance to Gross Receipts
Atchison . .	$8,480	$2,379	28%	Gt. No. . .	$7,921	$1,786	22%
B. and O. . .	17,500	4,570	26%	L. Valley . .	22,000	6,319	28%
C. P.	6,279	1,893	30%	M. K. and T.	7,100	1,800	25%
C. and O. . .	12,170	3,601	29%	Mo. P. . . .	7,235	2,000	27%
St. Paul . .	7,460	1,689	22%	N. Y. Central	24,318	5,800	23%
North W. . .	8,434	1,941	23%	N. Haven .	25,248	5,371	21%
D. & H. . .	22,539	4,032	18%	No. Pacific .	9,950	2,260	22%
D. and Rio G.	7,624	1,858	24%	Penn.. . . .	35,500	9,400	26%
Erie	20,920	5,502	26%	So. Pacific .	10,600	2,780	26%
						Average	25%

with that of other southern roads it again seems as if the charges of the Central were excessive. This table, on a

	Atlanta Birm. and Atlantic		Atlantic Coast Line		Seaboard Air Line		Atlanta West Point		Southern	
	1907	10 yrs[2]	1907	10 yrs	1907	10 yrs	1907	10 yrs	1907	10 yrs
Gross . .	$4,081	—	$6,158	$5,226	$6,352	$5,310	$13,600	$10,700	$7,700	$6,584
Maint . .	1,138	—	1,806	1,403	1,732	1,386	3,764	3,188	2,284	1,884
Percent .	28%	—	29%	27%	27%	26%	28%	29%	30%	29%

[1] I have computed the maintenance charges (per mile) for the following systems for the period 1899–1909.

[2] The ten-year interval is from June 30, 1899, to June 30, 1909.

mileage basis, shows clearly, then, that both for the year in question and for the whole decade the Central of Georgia was expending a larger percentage for maintenance than roads having a similar location and similar traffic. A large proportion of this was for improved rails, but these cannot be charged to net earnings.[1] In the present case the court concluded that $240,000 of net income had been spent for capital account.

It will be remembered that the Thorne-Harriman interests, which controlled the five million common stock in 1907, admitted a net income of $461,030 from which they paid the five per cent on the first income and the 3.729% on the second income bonds. To this sum the court further added the amounts just mentioned, together with some smaller items, as net income falsely charged to capital. As a result the bookkeeping surplus of $32.95 was changed to an actual surplus of $591,934, after paying the full five per cent to all the income bond holders. This was 11.4% on the five million of capital stock.

Railroad:	Available		$461,030
Court:	Ocean Steamship Co. net	$542,399	
	Lumber Reserve[2]	100,000	
	Maintenance	240,110	
	Minor Items	81,223	
		963,732	
	Clerical Error[3]	102,828	860,904
	Total Available		$1,321,934
	1st, 2d, and 3d Income Bonds		750,000
	Surplus		$ 571,934
	On $5,000,000 stock		11.4%

This decision by the Supreme Court of the state gives a clear expression to the legal rights of income bond holders. Reports of subsidiary companies kept back, excessive

[1] Mackintosh v. Flint and Pere Marq. R. R. Co., 34 Fed. 608.

[2] Excessive reserve for unadjusted freight claims on timber.

[3] Clerical bookkeeping errors in favor of company.

reserves for unpaid claims, "liberal" maintenance charges cannot be used to efface net earnings. It brings again to the foreground the definition of the United States Supreme Court as to what constitutes net earnings.

The whole controversy also helps to bring to an end the already closing chapter of income bonds in our financial history. Planned originally to meet a pressing need, they failed when brought to simple tests. They have proved undesirable from the point of view of the investor because he is not a true creditor in the ordinary sense that a bond holder is, yet at the same time he has no voting power such as that exercised by the stockholder. His interests are in continual conflict with those of the other security holders. The income bonds have also proved undesirable from the point of view of the road, and for the following reasons. (1) The continual dispute between the management and the income bond holders disturbs any possible harmony of interests and management. (2) This dispute injures the general credit of the road. If the income bond holders have their way, it becomes difficult to build up the road by liberal maintenance appropriations and as far as capital expenditures is concerned the road finds it difficult to persuade the income bond holders to allow the directors to issue new mortgage or debenture bonds which shall have a prior claim on the earnings, — thereby any legitimate expansion and improvement of the road is hampered. (3) And lastly, the presence of income bonds is now accepted as a confession of financial weakness at some time in the immediate past.

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